# Complete Summary

#### **GUIDELINE TITLE**

American Academy of Orthopaedic Surgeons (AAOS) clinical guideline on low back pain/sciatica (acute) (phases I and II).

#### BIBLIOGRAPHIC SOURCE(S)

American Academy of Orthopaedic Surgeons (AAOS). AAOS clinical guideline on low back pain/sciatica (acute) (phases I and II). Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS); 2002. 43 p. [340 references]

# **COMPLETE SUMMARY CONTENT**

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
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CATEGORIES

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## **SCOPE**

## DISEASE/CONDITION(S)

Acute low back pain, in skeletally mature individuals, not associated with trauma, infection, or major neurological deficit, of uncertain origin or due to:

- Herniated nucleus pulposus/herniated lumbar disc
- Unremitting low back pain/instability
- Spondylolysis, lytic spondylolisthesis, or degenerative spondylolisthesis/stenosis
- Lumbar spinal stenosis

#### **GUIDELINE CATEGORY**

Diagnosis Evaluation Management Treatment

#### CLINICAL SPECIALTY

Emergency Medicine
Family Practice
Internal Medicine
Neurological Surgery
Neurology
Orthopedic Surgery
Physical Medicine and Rehabilitation
Rheumatology
Sports Medicine

#### INTENDED USERS

**Physicians** 

# GUIDELINE OBJECTIVE(S)

- To improve patient care by outlining the appropriate information gathering and decision-making processes involved in managing low back pain with sciatica in adults
- To guide qualified physicians through a series of diagnostic and treatment decisions in an effort to improve the quality and efficiency of care

#### TARGET POPULATION

Adults (skeletally mature individuals) with acute low back pain of uncertain origin, not associated with trauma, infection, or major neurological deficit

#### INTERVENTIONS AND PRACTICES CONSIDERED

# Diagnosis

- 1. Patient history, including onset and duration of symptoms and pain location
- 2. Physical examination, including stance and gait; spine, hip, and lower extremity range of motion; straight-leg raise and reverse straight-leg raise; and neurologic examination

# Phase I Treatment Interventions for First Contact Physicians

- 1. Combination of activity modification, oral medication (analgesics, nonsteroidal anti-inflammatory drugs [NSAIDs], muscle relaxants for acute spasms), self-applied thermal modalities, physical therapy, and follow-up visits
- 2. Treatment modifications, including change of NSAID, or change in active physical therapy
- 3. Referral to a musculoskeletal specialists

#### Phase II Treatment Interventions for Musculoskeletal Specialists

- 1. Pain control, such as:
  - Back first aid

- Trial of exercises
- Pharmacotherapy such as NSAIDs, analgesics, or corticosteroids (oral or epidural)
- 2. Exercise training, such as soft tissue flexibility, joint mobility, stabilization program, abdominal program, gym program, or aerobic program
- 3. Physician-patient discussion of options, including natural history of underlying condition, efficacy of various treatment options, accuracy and options in diagnostic testing, risks and complications of treatment options, reasonable expectations of treatment options, and time frame to accomplish expected outcome
- 4. Surgery, such as discectomy/decompression, spinal fusion, instrumentation
- 5. Other types of nonoperative treatments, such as psychological treatment, 1-3 injection program, multidisciplinary program, trial of bracing
- 6. Long-term care plan, such as activity and lifestyle modifications, proper back hygiene, exercise, vocational alternatives, managing pain flares, periodic physician follow-up

#### MAJOR OUTCOMES CONSIDERED

- Activity and level of function
- Radicular pain levels

#### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Literature Review: A search of MEDLINE was performed in order to update the literature used to develop the original guideline. English language journals were searched from 1988 to 2001; human studies of adults over 19 years of age were included.

#### NUMBER OF SOURCE DOCUMENTS

Of the abstracts generated by the search, 341 articles were graded by the work group and included in the bibliography.

# METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Type I. Meta-analysis of multiple, well-designed controlled studies; or high power randomized, controlled clinical trial

Type II. Well-designed experimental study; or low-power randomized, controlled clinical trial

Type III. Well-designed, nonexperimental studies, such as nonrandomized, controlled single-group, pre-post, cohort, time, or matched case-control series

Type IV. Well-designed, nonexperimental studies, such as comparative and correlational descriptive and case studies

Type V. Case reports and clinical examples

Consensus/opinion (as it is used in bibliography of the original guideline): Articles representing expert consensus and not meeting the rigid I-V measurement are noted to represent consensus/opinion.

#### METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Consensus Development: The work group participated in a series of conference calls and meetings in which information was extracted and incorporated into the original algorithm. Information from the literature was supplemented by the consensus opinion of the work group, when necessary. Multiple iterations of the guideline were then completed and reviewed by work group members. Modifications (when supported by references from the literature) were then incorporated by the work group chairman.

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

#### Strength of Recommendation

The strength of the guideline recommendations for or against an intervention was graded as follows:

- A. Type I evidence or consistent findings from multiple studies of types II, III, or  ${\sf IV}$
- B. Types II, III, or IV evidence and findings are generally consistent
- C. Types II, III, or IV evidence, but findings are inconsistent
- D. Little or no systematic empirical evidence

#### **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Internal Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The revised guideline was reviewed and approved by various groups within the American Academy of Orthopaedic Surgeons, including the Evidence Analysis Work Group, Evidence-Based Practice Committee, Council on Research, Board of Councilors, and Board of Directors.

## RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

Definitions for the ratings of the strength of recommendation (A-D) and the levels of evidence (Type I-Type V) are provided at the end of the "Major Recommendations" field.

The Phase I portion of the guideline focuses on the four- to six-week period when this commonly occurring form of back pain will most likely improve or resolve spontaneously or will respond to various forms of activity modification, non-narcotic drugs, and education. The Phase II portion of the guideline delineates a reasonable approach to further evaluation and treatment by the musculoskeletal specialist.

# <u>Universe of Adult Patients with Low Back Pain and Sciatica (Acute) -- Phase I</u>

Definition of the Problem

At least 90% of the population at one point or another during their lifetime will experience low back pain.

#### Recommendations

Certainly the vast majority of patients presenting with low back pain will be treated in a nonoperative fashion. A history is obtained from the patient upon the initial visit, followed by an appropriate physical examination. When evaluating patients with low back pain, it is important to consider the critical exclusionary diagnoses, most important of which are fracture, infection, tumor, progressive neurological deficit, and cauda equina syndrome. Once these more serious conditions have been excluded, treatment should begin with activity modification according to the severity of the symptoms, medications, analgesics, muscle relaxants, self-applied thermal modalities, physical therapy, and manual therapy.

Short (no more than two days) episodes of bed rest may be used as the modification of activity. An active exercise program is appropriate ("B" recommendation) (Dettori et al., 1995; Faas et al., 1995; Leclaire, et al., 1996; Malmivaara et al., 1995; Underwood & Morgan, 1998).

#### **Expected Clinical Results**

The expected clinical results for the overwhelming majority of patients will be a favorable response in a relatively short period of time to a course of nonoperative, noninvasive therapy. If the patient responds favorably to the above program, then no further treatment is necessary; if not, then the history, physical exam, and review of exclusionary diagnoses are repeated upon return visits with the physician. If no response at four to six weeks, then a diagnosis is obtained from diagnostic studies (e.g., x-ray, magnetic resonance imaging [MRI]), and specialized care, as delineated in the Phase II Clinical Guideline on Low Back Pain (see below) is warranted.

# Alternative Approaches

All forms of nonoperative treatment would be available, while operative interventions in the early course of the disease would be reserved only for the exclusionary diagnoses such as a progressive neurologic deficit, fracture, infection, tumor, or cauda equina syndrome.

# Adult Patients with Low Back Pain/Sciatica (Acute) -- Phase II

#### Differential Diagnoses

## Herniated Nucleus Pulposus/Herniated Lumbar Disc

#### Definition of the Problem

A herniated lumbar intervertebral disc is the most common cause of radicular pain to the lower extremities. The lumbar discs are subjected to repeated deformations and large loads with physiologic motion of the spine. In some individuals fragmentation of the disc may result, followed by annular rupture and, finally, a herniation of the nucleus pulposus into the spinal canal. The acute manifestation of a symptomatic herniated nucleus pulposus is a segmental neurologic deficit secondary to root compression. The radicular nature of the pain is aggravated by motion of the spine, coughing, sneezing, or any mechanism that causes increased pressure to the root. Compression of the root may also cause paresthesias, loss of a deep tendon reflex, and weakness of specific muscle groups. A herniated nucleus pulposus is most commonly seen in those patients from twenty to fifty years of age.

#### Recommendations

The initial evaluation of the patient should include the location and distribution of the pain. Progressive annular rupture may present with back pain with a nonradicular pain. A herniated nucleus pulposus with root compression presents with a true radicular pattern of pain along the affected root. A neurological exam

of the lower extremities should include, and not be limited to, sensation to touch, motor testing, deep tendon reflexes, and the presence or absence of pathologic reflexes. Diagnostic studies should be used to confirm the diagnosis. The most common, sensitive, and specific is the MRI of the lumbar sacral spine ("B" recommendation) (Boden et al., 1990; Bradley, 1999; Carragee & Kim, 1997; Guyer & Ohnmeiss, 1995).

The differential diagnoses should include epidural abscesses, tumors, spinal meningiomas, and neurofibromas. Bony compression resulting from osteoarthritis and rheumatoid arthritis (RA) may also compress isolated nerve roots. Diabetes and herpes zoster may also cause radiating symptomatology.

Initial treatment may include a period of bed rest not to exceed 2 days. During this period, analgesic and nonsteroidal anti-inflammatory drugs (NSAIDs) may be administered. If the pain persists, epidural steroids may be considered ("B" recommendation) (Benzon, 1986; Bush & Hillier, 1991; Carette et al., 1997; Cuckler et al., 1985; McNeill et al., 1995). Exercise programs may be instituted if the pain decreases. Surgery should be considered if the pain is persistent and severe and the history, physical findings, and diagnostic studies are compatible with a specific root lesion. Early surgical intervention should be considered if the pain is increasing in severity, or if motor, bowel, or bladder dysfunction is present ("B" recommendation) (Albert et al., 1996; Deyo et al., 1992; Donceel, Du Bois, & Lahaye, 1999; Hurme & Alaranta, 1987; Komori et al., 1996).

#### Clinical Outcomes

The majority of patients presenting with radicular pain secondary to a herniated lumbar disc will respond favorably to the above program. Reduction of radicular pain and return to normal activities of daily living should be expected. For those patients that do not respond, a re-evaluation of the clinical and medical history and further confirmatory studies are recommended ("B" recommendation) (Albert et al., 1996; Deyo et al., 1992; Donceel, Du Bois, & Lahaye, 1999; Hurme & Alaranta, 1987; Komori et al., 1996).

#### Alternative Approaches

In the absence of severe neurological compromise, a repeated course of pain management with epidural steroids in conjunction with lifestyle modification, vocational alternatives, psychological support, intermittent NSAID usage, and vertebral manipulation may be considered ("B" recommendation) (Albert et al., 1996; Benzon, 1986; Bush & Hillier, 1991; Carette et al., 1997; Carragee, Helms, & O'Sullivan, 1996; Cuckler et al., 1985; Deyo et al., 1992; Donceel, Du Bois, & Lahaye, 1999; Hurme & Alaranta, 1987; Komori et al., 1996; McNeill et al., 1995; Nwuga, 1982; Piperno et al., 1997; Riew et al., 2000; Saal & Saal, 1989).

# Unremitting Lower Back Pain

## Definition of the Problem

Although unremitting lower back pain that continues for more than 6 months is not a threat to the patient's life as is a terminal disease, it can be both physically

and psychologically debilitating and can be a major threat to a patient's well-being. Because of the frequently enigmatic origins of this condition, results of diagnostic evaluation can be ambiguous, and therapeutic interventions are frequently ineffective in providing long-term relief. This diagnostic uncertainty and the resulting frequent failure of therapeutic interventions have led to a disproportionately high allocation of healthcare resources to the relatively small percentage of patients with lower back complaints that experience this unremitting, chronic pattern.

#### Recommendations

A thorough history and physical examination and a review of routine imaging will help to identify patients with exclusionary diagnoses who should be referred to a specialist. The MRI is recommended as the diagnostic test of choice in chronic, unremitting lower back pain when additional diagnostic information is required ("B" recommendation) (Ehni, 1969). Once an exclusionary diagnosis has been ruled out, reassurance and nonoperative care are the cornerstones of treatment. Unlike the pain of a life-threatening disease or injury, the pain of unremitting lower back pain does not necessarily imply significant tissue damage or a threat to the patient's existence. Reassurance of this fact is critical to a patient's wellbeing. Furthermore, since diagnosis is difficult and surgical outcomes often disappointing, nonoperative care is the treatment of choice in most cases of unremitting lower back pain. The chronic use of central nervous system (CNS)affective analgesics (narcotics) is to be discouraged because of their depressive side effects and addictive potential when used for a prolonged time. When a patient presents for treatment already utilizing these drugs in frequent or high doses, consideration of detoxification is warranted.

After evaluation and discussion of the patient's condition, the treating physician and the patient may choose one of two general courses of further treatment. In most cases the choice will be to pursue more intensive, nonoperative care. The use of passive or manipulative therapy in chronic, unremitting back pain has little consistent support in the literature reviewed. The use of exercise and exercise-based therapy, however, is supported by a majority of the literature ("B" recommendation) (Alaranta et al., 1994; Frost et al., 1995; Hansen et al., 1993; Nelemans et al., 2001; O'Sullivan et al., 1997), and is important in minimizing the symptoms of chronic lower back pain. Activity is favored over passivity in treatment.

Depression and other psychological barriers to treatment are often encountered in patients with unremitting lower back pain. When psychosocial factors are identified and appear to be influencing treatment, they should be evaluated and treated, if possible ("B" recommendation) (Basler, Jakle, & Kroner-Herwig, 1997; Friedrich et al., 1998).

The use of epidural steroid injections, therapeutic facet injections, and trigger point injections for improvement in long-term outcomes of unremitting lower back pain is not recommended ("B" recommendation) (Garvey, Marks, & Wiesel, 1989; Nelemans et al., 2001). These injection techniques may, however, have a very limited role in the treatment of an acute exacerbation superimposed upon the chronic and unremitting condition to establish pain control ("C" recommendation) (Garvey, Marks, & Wiesel, 1989; Nelemans et al., 2001).

Finally, for a small subgroup of recalcitrant patients that have failed less intensive treatment, a combination of nonoperative treatments with an emphasis on activation and the elimination of physical and psychosocial barriers in a multispecialty program of functional restoration may be helpful ("B" recommendation) (Bendix et al., 1998; Mayer et al., 1985).

In choosing to pursue consideration of operative treatment in a small number of patients, the treating physician may suspect a symptomatic, anatomic lesion that requires further diagnostic evaluation. Further diagnostic evaluation should only proceed if the treating physician and the patient both feel operative intervention is an option. Because good surgical outcomes remain elusive in unremitting back pain, additional nonoperative care could reasonably be recommended at this point. However, a high suspicion of a symptomatic and correctable lesion that would doom conservative care could also be used to recommend further diagnostic work-up for possible operative intervention. As noted above, the MRI is the test of choice for evaluation beyond routine lumbar spinal x-rays with flexion and extension views to detect instability. It is the most sensitive and also most specific of current imaging techniques and should be used to guide further investigation. The appearance of an abnormality on an MRI, however, is frequently insufficient to commit a patient with unremitting lower back pain to surgical intervention. There is demonstrated a high frequency of similar changes in the MRIs of asymptomatic individuals with no history of back pain. Thus there would appear to be a role for evocative testing to stimulate areas of abnormality identified on MRI in an attempt to identify one or more of these abnormalities as in fact the source of the patient's back pain. The discogram is one such test.

The discogram is a sensitive but not very specific test for anterior column pain sources and thus should not be used alone to determine the need for surgical intervention. Likewise there is support for the use of facet blocks as a diagnostic test for a posterior spinal column pain source. It must be noted, however, that neither of these tests has level I or II evidence to support their ability to consistently predict good surgical outcomes. Furthermore, the concurrent existence of significant psychological barriers to wellness reduces the predictive value of these tests even further. When a painful anatomic lesion can be appropriately identified with a thorough and complete work-up and when no significant psychosocial barriers exist to wellness, lumbar fusion may be recommended as a treatment for disabling low back pain in these appropriately selected patients ("B" recommendation) (Fritzell et al., 2001).

#### Clinical Outcomes/Alternative Approaches

If diagnostic evaluation does not reveal a surgically correctable lesion or if the patient is felt to have psychosocial barriers that disallow valid evaluation or surgical treatment, then the nonoperative arm of treatment is medically reasonable and surgery should not be attempted. Likewise, if surgery is elected and the surgical outcome is not satisfactory, then the nonoperative arm of treatment is medically appropriate.

Spondylolysis, Lytic Spondylolisthesis, or Degenerative Spondylolisthesis (SLIP)

Definition of the Problem

Spondylolisthesis is defined as anterior subluxation of one lumbar vertebra over another. It is present in 5% of the adult population, with the degenerative variety afflicting up to 30% of women over 60 years age. One of the challenges in diagnosing spondylolisthesis is differentiating the long-standing isthmic spondylolisthesis from a new degenerative process at another level.

#### Recommendations

The patient should be treated with the usual Phase I treatment and assessment of critical exclusionary diagnoses. Once the diagnosis of spondylolisthesis has been made, an evaluation for instability and neurologic deficit is then done. If this is positive, then an ongoing more sophisticated diagnostic battery of tests including MRI, computed tomography (CT), myelogram/CT, bone scan, discography, or facet lysis injections would be appropriate. The vast majority of patients can be successfully treated nonoperatively ("B" recommendation) (Fredrickson et al., 1984). The nonoperative program would include nonsteroidals, analgesics, active exercise, physical therapy, bracing, and possibly injections. If the patient fails nonoperative treatment, then surgery would be considered. The mainstay of surgery for any spondylolisthesis would be fusion ("B" recommendation) (Carragee, 1997; Fischgrund et al., 1997; Freeman & Donati, 1989; Harris & Weinstein, 1987; Herkowitz & Kurz, 1991; Wiltse & Rothman, 1989). This then comes with the option of decompression and/or instrumentation.

#### **Expected Clinical Results**

The vast majority of patients with spondylolisthesis-related back pain will be successfully managed nonoperatively. If surgery is necessary and undertaken, then this would have a reasonable likelihood of returning the patient to an acceptable level of function.

#### Alternative Approaches

The nonoperative methods that include all aspects of lower back care, but these have not been demonstrated to have outcomes that warrant current recommendations.

#### **Lumbar Spinal Stenosis**

#### Definition of the Problem

Lumbar spinal stenosis involves the clinical symptoms of lower extremity neurogenic claudication or radiculopathy. The symptoms of neurogenic claudication are aggravated by standing erect as well as walking, and are relieved by forward flexion of the spine or sitting. Symptoms usually involve groin, thigh, and buttock pain with a variable neurological picture. Patients usually present in the fifth decade or greater. The physical exam may demonstrate ambulation with a forward flexed fashion as well as symptomatic aggravation with lumbar spinal extension.

### Recommendations

The initial goal in the treatment of patients with lumbar spinal stenosis is to provide relief of pain and to return patients to their normal activities of daily living. Clinically mild to moderate symptoms may be treated with NSAIDs, analgesics, active exercise, physical therapy, and/or a bracing trial ("B" recommendation) (Ciocon et al., 1994; Deen et al., 1994; Fukusaki et al., 1998; Murakami et al., 1997; Fritzell et al., 2001). If the treatment response to these modalities is poor, then confirmatory studies are undertaken. If these studies are positive, then trial of an injection program may be considered or a discussion of surgical options may be undertaken.

For clinically severe symptoms that are confirmed by imaging studies such as MRI, CT, CT myelogram, or energy dispersive spectroscopy (EDS), a doctorpatient discussion of treatment options should ensue. These involve both operative and nonoperative options. For those patients that respond to nonoperative treatments, a gradual return to normal activities ensues. For those patients that do not respond to nonoperative treatments, surgical options are proposed.

Posterior surgical decompression is undertaken for the symptomatic patient that fails to respond to nonsurgical modalities or presents with progressive neurological deficit ("B" recommendation) (Hall et al., 1985; Hanakita, Suwa, & Mizuno, 1999; Herno et al., 1995; Hurri et al., 1998; Javid & Hadar, 1998; Jonsson et al., 1997; Katz et al., 1995; Katz et al., 1996; Katz et al., 1991; Larequi-Lauber et al., 1997; Postacchini et al., 1993; Sanderson & Wood, 1993; Vitaz et al., 1999). If greater than 50% of the facet joints are removed bilaterally, then fusion with or without instrumentation is considered ("B" recommendation) (Abumi et al., 1990; Bridwell et al., 1993; Fox, Onofrio, & Hanssen, 1996; Grob, Humke, & Dvorak, 1995; Johnsson, Willner, & Johnsson, 1986; Katz et al., 1997; Nasca, 1989; Fritzell et al., 2001). Patients that respond to surgical treatment may gradually resume normal activities. If patients fail surgical treatment, consider a reevaluation of the clinical findings and the need for additional confirmatory imaging.

#### **Expected Clinical Results**

The expected clinical result is to return patients to normal activities as well as decrease their overall pain level.

## Alternative Approaches

Alternative approaches may include lifestyle modifications, repeated pain management trials, and/or a variety of assistive devices such as canes and walkers.

# Definitions:

## Type of Evidence

Type I. Meta-analysis of multiple, well-designed controlled studies; or high-power randomized, controlled clinical trial

Type II. Well-designed experimental study; or low-power randomized, controlled clinical trial

Type III. Well-designed, nonexperimental studies such as nonrandomized, controlled single-group, pre-post, cohort, time, or matched case-control series

Type IV. Well-designed, nonexperimental studies, such as comparative and correlational descriptive and case studies

Type V. Case reports and clinical examples

# Strength of Recommendations

- A. Type I evidence or consistent findings from multiple studies of types II, III, or IV
- B. Types II, III, or IV evidence and findings are generally consistent
- C. Types II, III, or IV evidence, but findings are inconsistent
- D. Little or no systematic empirical evidence

# CLINICAL ALGORITHM(S)

Algorithms are provided for:

- Universe of adult patients with low back pain/sciatica (acute) Phase I
- Adult patients with low back pain/sciatica (acute) Phase II,/a>

# EVIDENCE SUPPORTING THE RECOMMENDATIONS

### REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is specifically stated and identified for each recommendation (see the "Major Recommendations" field).

# BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

# POTENTIAL BENEFITS

Improved care of patients with low back pain/sciatica

# POTENTIAL HARMS

Nonsteroidal anti-inflammatory drugs (NSAIDs) may produce side effects and are not tolerated in all individuals.

# CONTRAINDICATIONS

#### **CONTRAINDICATIONS**

Nonsteroidal anti-inflammatory drugs (NSAIDs) are relatively contraindicated in patients with renal insufficiency or pregnancy. Administer cautiously in individuals with hypertension or gastrointestinal intolerance. Side effects and toxicity should be monitored during administration.

# QUALIFYING STATEMENTS

#### **QUALIFYING STATEMENTS**

- This guideline should not be construed as including all proper methods of care
  or excluding methods of care reasonably directed to obtaining the same
  results. The ultimate judgment regarding any specific procedure or treatment
  must be made by the treating physician after a full assessment of all
  circumstances presented by a patient, including the needs and resources of a
  particular locality or institution.
- This guideline does not address all possible conditions associated with low back pain, only those that account for the majority of initial visits to a physician.

## IMPLEMENTATION OF THE GUIDELINE

#### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

**IOM CARE NEED** 

Getting Better Living with Illness

IOM DOMAIN

Effectiveness

#### IDENTIFYING INFORMATION AND AVAILABILITY

# BIBLIOGRAPHIC SOURCE(S)

American Academy of Orthopaedic Surgeons (AAOS). AAOS clinical guideline on low back pain/sciatica (acute) (phases I and II). Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS); 2002. 43 p. [340 references]

#### **ADAPTATION**

Not applicable: The guideline was not adapted from another source.

#### DATE RELEASED

1996 (revised 2002)

# GUIDELINE DEVELOPER(S)

American Academy of Orthopaedic Surgeons - Medical Specialty Society North American Spine Society - Medical Specialty Society

# SOURCE(S) OF FUNDING

American Academy of Orthopaedic Surgeons

#### **GUIDELINE COMMITTEE**

American Academy of Orthopaedic Surgeons Task Force on Clinical Algorithms

## COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Revision panel: Thomas Haher, MD, Chairman; Andrew Merola, MD; Glenn Rechtine, MD; William C. Watters, III, MD

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Advisory Group: Hansen Yuan, MD; Harry N. Herkowitz, MD; Elmer Nix, MD; Garth Russell, MD; Sam Weisel, MD; Reginald Cooper, MD; Don Long, MD; Jeffrey Susman, MD; Ernest Found, MD; Gene Swanson, MD

#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

#### **GUIDELINE STATUS**

This is the original release of this guideline.

This guideline updates a previous version: American Academy of Orthopaedic Surgeons. Clinical guideline on low back pain. Rosemont (IL): American Academy of Orthopaedic Surgeons; 1999. 16 p.

#### **GUIDELINE AVAILABILITY**

Electronic copies: Available from the <u>American Academy of Orthopaedic Surgeons</u> Web site.

Print copies: Available from the American Academy of Orthopaedic Surgeons, 6300 North River Road, Rosemont, IL 60018-4262. Telephone: (800) 626-6726 (800 346-AAOS); Fax: (847) 823-8125; Web site: <a href="www.aaos.org">www.aaos.org</a>.

#### AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Adult patients with low back pain/sciatica [ACUTE] -- Phase I. Rosemont (IL): American Academy of Orthopaedic Surgeons; 2002. 1 p. Electronic copies: Available in Portable Document Format (PDF) from the <u>American Academy of Orthopaedic Surgeons Web site</u>.
- Adult patients with low back pain/sciatica [ACUTE] -- Phase II. Rosemont (IL): American Academy of Orthopaedic Surgeons; 2002. 5 p. Electronic copies: Available in Portable Document Format (PDF) from the <u>American</u> Academy of Orthopaedic Surgeons Web site

Print copies: Available from the American Academy of Orthopaedic Surgeons, 6300 North River Road, Rosemont, IL 60018-4262. Telephone: (847) 823-7186; (800) 346-AAOS. Fax: (847) 823-8125. Web site: <a href="https://www.aaos.org">www.aaos.org</a>.

#### PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on March 15, 2000. The information was verified by the guideline developer on July 11, 2000. This NGC summary was updated by ECRI on August 10, 2004. The information was verified by the guideline developer on September 1, 2004.

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